MT EVENNESS TESTER FOR SPUN YARNS, ROVINGS AND SLIVERS
**MT EVENNESS TESTER** code 2341

For all types of natural, artificial and synthetic spun yarns

**Description**

MT is designed to measure with high accuracy the mass evenness and imperfections of yarn. MT stands out for the high quality capacitive sensor which is suitable to test yarns, rovings and slivers without need of another external sensor. It is therefore very easy to control the mass variation in the whole spinning process as well as to identify the exact origin of the faults in the spinning process by analysing the spectrogram.

**Technical Features**

- Exclusive capacitive MT-sensor suitable to test from very fine yarns (Ne 200/1) to coarse slivers (80gr/mt)
- Modular system for fully automatic operation upgrade and for hairiness testing
- Equipped with stand for roving and slivers
- Engineered, designed and manufactured in Italy
- Automatic calibration before testing
- Windows MT software with statistics, graphs and data storage
- Numerical and graphical results compatible with the most popular world standards
Modular system

**H-sensor code 2342 (optional)**

Hairiness sensor to analyse yarn hairiness

Determination of Hairiness (H) and standard deviation of Hairiness (sh)

Statistical and graphical elaboration of hairiness testing

Diagram and spectrogram of the H value to verify the source of the hairiness in the spinning process

**Moveable yarn creel 24 positions code 3102 (optional)**

24 position creel fitting wheels, easy to move Suitable for cones and cops

Equipped with adjustable yarn pretensioning disc

**Automatic Cop Changer 24 positions code 299A (optional)**

Fully automatic 24 position device suitable for all kinds of yarn and count

Enabling fully automatic yarn testing without operator’s attendance

Suitable for cops and cones

Compatible with other Mesdan-Lab automatic testing equipment, such as “Autodyn” automatic strength tester, “Twistmatic” automatic twist tester, “Attrifil” yarn friction tester

**UPS device code 2341.900 (optional)**

Uninterruptible power supply device, always recommended to preserve the instrument in case of power supply fluctuations.


**Results of each individual test**

- CV% coefficient of mass variation
- U% mean deviation of mass variation
- AVE relative yarn count
- IPI with 4 channels for neps, thick places, thin places
- DR% with 4 channels
- CV(L)% with 4 reference lengths

**Graphic data of each individual test**

- Diagram of mass variations
- Diagram of mass variations in inert of half inert mode
- Spectrogram up to 160 channels

**Statistics and other results**

- Mean, range, standard deviation (s), CVB%
- 95% confidence limits (Q95%)
- IPI per 1000m (1 km) of yarn length
- DR%, CV(L)%, overall spectrogram
- Data and graphics saved in MT database, printable and exportable to MS Excel format

**Measuring Specifications**

- Range of material: Ne 200 (yarn) to 80g/m (sliver)
- Dynamic measuring range: ±100%, ±50%, ±25%, ±12.5%
- Measuring mode: inert or half inert mode
- Material speed: 8 - 25 - 50 - 100 - 200 - 400 m/min
- Evaluating time: 10” to 19’ 50” at every increment of 10”
- Significant CV% and U%; 0.20% to 99.99%

**Spectrogram**

- Number of channels: max.160 channels
- Analyzed wave lengths:
  - 2 cm to 1225.9 m at 400m/min and 6 mins
  - 1 cm to 613.0m at 200m/min and 6 mins

**IPI (imperfections)**

- Number of channels: 4 channels
- Thin places: -60%, -50%, -40%, -30%
- Thick places: +100%, +70%, +50%, +35%
- Neps: +400%, +280%, +200%, +140%

**Deviation rate DR%**

- Number of channels: 4 channels
- Reference length: 0.01 to 10 m
- Level: ±0.01% to ±99.99%

**CV(L)%**

- Number of channels: 4 channels
- Reference length: 0.01 to 10 m

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print-out example
MT EVENNESS TESTER

DESCRIPTION

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OPTIONALS

- H-sensor hairiness sensor code 2342
- Auto Cop Changer (A.C.C.) for automatic testing up to 24 bobbins complete with table support code 299A
- Creel vertical creel 24 bobbins for supply to A.C.C. code 3102
- UPS uninterruptible power supply device code 2341.900

DIMENSIONS / POWER SUPPLY

Evenness Tester code 2341: 400 (W) x 750 (H) x 500 (L) mm
Auto Cop Changer code 299A: 535 (W) x 250 (H) x 259 (L) mm
Creel code 3102: 600 (W) x 2000 (H) x 600 (L) mm
Ups code 2341.900: 100(W) x 270 (H) x 320 (L) mm

Single-phase 110/220V, 50/60Hz
Measuring frame: 0.2 Mpa and about 4m³/h
Auto Cop Changer 0.6 Mpa and about 4m³/h

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